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## A NEW SPECIES OF THE GENUS MACROCEPHALUS SWEDERUS FROM MEXICO

(HEMIPTERA : PHYMATIDAE)

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Through the kind offices of Dr. Joseph C. Shaffner, Associate Professor at the Texas A. & M. University, College Station, Texas, I have had the privilege of examining a small lot of *Macrocephalus* Swederus from the southern United States and Mexico, for which I express to him my sincere thanks.

In this lot were six known and one new species. Five of the species are common in this area: *M. cimicoides* Swederus, five specimens

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from Texas; *M. incisus* Stål, seven specimens from Mexico; *M. pre-hensilis* (Fabricius), 12 specimens from Mississippi, Missouri and Texas; *M. stali* Handlirsch, three specimens from Texas and Mexico. The rare Mexican species *M. spiculosus* Champion was represented by a lone specimen from Simojovel, Chiapas. The new species is described below.

## Macrocephalus (Lophoscutus) spiculiger, n. sp. (Fig. 1)

Male. Closely related to *M. lepidus* Stål and running to it in the Handlirsch's key for *Macrocephalus* species (1897:182). It is of the same shape and color, only the male has more black color, and less brown, and the size is slightly smaller (5.5 mm.). The main differences are: fore disc of pronotum in both sexes with small, sharp, erect, black spicules instead of round granules; anterolateral-anterior borders of pronotum finely denticulate, bearing yellow spicules instead of rounded granules, the spicules slightly longer and not so sharp as those on fore disc. Other characters as in *M. lepidus*.

*Head* cylindrical, brown, densely covered with fine, sharp, black granulation. Antennae of male with segments I and IV black, II and III brown with black spot; of female, I–III orange yellow, IV green.

*Pronotum* with anterior border sinuate; antero-lateral angles acute, slightly divergent; antero-lateral-anterior borders straight, convergent forward, denticulate; lateral notch shallow, sinuate; antero-lateral-posterior borders convex, rounded, very finely granulate; lateral angles barely incised; postero-lateral borders deeply sinuate; posterior angles small, acute; posterior border convex, rounded medially. Fore disc moderately inflated, declivous, brown with dense, erect, sharp, black spicules; antero-lateral-anterior borders, and lateral notch, pale yellow; postero-lateral borders rimmed with white; rest of pronotum black. In the female, black color replaced by testaceous, only spicules on fore disc black. Hind disc roughly punctured.

Scutellum tongue-shaped, reaching slightly over the tip of abdomen in both sexes. Median carina linear (*Lophoscutus* type), clearly visible, deeply depressed base pale yellow, elsewhere convex (in the female greenish-yellow). Disc very roughly punctured at base, punctures progressively diminishing toward tip, there one-fourth as large. Color: base, large elongate ovate spot in the middle of disc, transverse band, and apical portion, black, all 3 spots contiguous with one another; 2 (1 + 1) lateral spots on fore half, and 2 (1 + 1), larger lateral spots on hind half, pale yellow, with exception of 6 (3 + 3) small spots on the latter, which also are black. In female, black color replaced by testaceous; lateral borders of hind half, and tip of disc testaceous with a few round, brown dots.

*Corium* black, exterior border pale yellow. In female, testaceous and greenish yellow. Disc with fine, whitish granules.

Abdomen strongly rounded laterally, more so in female. Connexivum wide and horizontal; connexivum II in both sexes with a narrow, reflexed edge slightly produced beyond outer border of connexivum III, other PE-angles of connexiva not protruding.

Ventral side: head yellowish green, rostrum green, pleurae and sternum orange yellow, venter and legs pale yellow to green; fore tibiae, tips of median and hind



Fig. 1. Macrocephalus (Lophoscutus) spiculiger, n. sp., 3. A = right paramere.

tarsi, and spots on connexivum IV, blackish. Fore tarsi absent. Paramere of type in subgenus *Lophoscutus*.

Measurements: first figure in ratios represents the length and the second the width of measured part, 25 units equal to 1 mm. Head:  $\delta$ —29:17.5,  $\varphi$ —30:18; relative length of antennal segments, I to IV, are:  $\delta$ —9(5):5(3.5):6(3):14(6),  $\varphi$ —8(4.5):4(3.5):5.5(3):10(5.5), figures in parentheses represent maximum width of segment; pronotum:  $\delta$ —35:52 (maximum width across fore lobe 25),  $\varphi$ —34:52.5 (maximum width across fore lobe 29); scutellum:  $\delta$ —73:40,  $\varphi$ —73:68,  $\varphi$ —71:72 (maximum width in both sexes is across segment III).

Total length: 3-5.52, 9-5.40 mm.; width of pronotum: 3-2.08, 9-2.10 mm.; width of abdomen: 3-2.72, 9-2.88 mm.

Holotype: &, MEXICO, Guerrero, 6 mi W of Iguala—P. M. & P. K. Wagner collectors, 10.VII.1966; USNM 69955.

Allotype: 9, MEXICO, Guerrero, 12 mi S of Chilpancingo, same collectors, 12.VII.1966; in the U. S. National Museum collection.

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## NOTES ON THE SYSTEMATICS AND MORPHOLOGY OF THE LACEBUG SUBFAMILY CANTACADERINAE

(Hemiptera: Tingidae)

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Deposition of the Carl J. Drake collection of Hemiptera-Heteroptera in the U. S. National Museum, especially the remarkably complete accumulation of known taxa of lace bugs, provided a unique opportunity to prepare a needed key to the tingid genera of the world. Based on that collection, the recent Drake and Ruhoff (1965a) catalogue, and appreciated help from NSF grant GB-791, such a key is being constructed. The necessity for changes and additions to the information in that catalogue and the desire to keep the generic key in a certain format leads me to early publication of changes and descriptions of new taxa.

The subfamily Cantacaderinae appears to be a natural and valid group whose included genera fall into two categories characterized by Drake and Davis (1960:78) as the tribe Cantacaderini with a "stenocostal area" (the single outermost row of cells of the costal area